### Best Available Copy

FR 3,203 M

Code: 282-5555

# FRENCH REPUBLIC MINISTRY OF INDUSTRY DEPARTMENT OF INDUSTRIAL PROPERTY SPECIAL DRUG PATENT NO. 3,203 M

Application No.:

962,111

Int. Cl.:

A 61 k

ANTISEPTIC CAPILLARY TINCTURE, NOTABLY FOR THE TREATMENT OF DISORDERS OF THE SCALP

Inventor:

M. Carl Joachim
Kleinwichs, resident of
Sweden

(Official Bulletin of Industrial Property, (B.S.M.) [Special Drug Patent], No. 17 of 1965.

Requested January 30, 1964 at 4:20 p.m. in Paris. Issued by decree March 22, 1965.

(Patent application filed in Sweden on January 22, 1964, under No. 765, in the name of the applicant.)

It is known that scales form on the scalp in, a layer of corneal plates assembled in groups, [composed] of dead epidermal cells. The dried scales usually appear before they are

transformed into fatty scales, due to an infection (according to Sabouraud). There are already numerous and varied causes of these discomforts, for example, irritation due to itching, an inflammatory state of the skin, a weakening or avitaminosis of the scalp, depigmentation, alopecia, etc.

Considering these symptoms and these drawbacks, four factors of antagonism were taken into account in combining the constituents of a capillary tincture:

- 1. Keratoplastic, nutrient and skin-regenerating purpose;
- 2. Antiseptic, antiparasitic action, and action of soothing the irritation due to pruritus;
- 3. Reaction to the loss of hair, strengthening of the scalp, and, as much as possible, acceleration of the growth of hair and improvement of the hair's natural vital conditions;
  - 4. Action on the pigmentation of the hair.

The action of the capillary tincture is based on the principal of stimulation, mobilization of the body's own forces and the acceleration of blood supply to the skin, to obtain the well conditioned resistive force of skin cells. All the constituents of the preparation combine their actions, they are synietized, and they mutually support each other in solving the above-mentioned problems.

For example, resorcinol, used as a keratoplastic agent in only a small quantity (0.5%), is used for the treatment of seborrhea with formation of scales, and it is supported in this action by the active constituents such as nicotinamide or vitamin PP in a quantity of 0.015%, and vitamin H or biotin also in a quantity of 0.015%.

Peru balsam (0.60%), a product used for the treatment of all infectious diseases of the skin, has a strong antiseptic action and it soothes the irritation due to pruritus, and at the same time supports the analogous action of the essence of birch in ether, the former also being used as perfume, and of resorcinol.

Pantothenic acid (1.0%), an agent against functional disorders of the skin and against alopecia, at the same time accelerates the pigmentation and the growth of hair (Karl Rothemann, Huff, Perlzweig), and it works in cooperation with active constituents such as inositol (0.01%) and vitamin  $B_6$  (0.03%).

Moreover, the capacity of pantothenic acid to act as a pigmentation factor in cases of depigmentation is supported by the action of the nicotinamide or vitamin PP (K. Rothemann).

The incorporated alcohol is irreplaceable in the capillary tincture, it acts as a stimulant to increase the nervous and vascular activity, and to increase the production of heat in and under the skin; it also stimulates the efficacy of action of any tincture. Indeed, it reduces the surface tension of the water and consequently it allows the homogeneous distribution of the capillary tincture on the scalp and hair.

According to the invention, no ethyl alcohol is used, instead pure cosmetic [grade] isopropanol, 99.9%, because the latter has a much better action against bacteria and much superior dissolving properties, compared to ethyl alcohol.

Given that an excessively high alcohol content could degrease the hair too much and cause an excessive secretion of the sebaceous glands, distilled water is also used in the tincture. The tincture thus contains only approximately 65% by

volume of isopropanol. The water at the same time serves as a solvent for some of the constituents.

The capillary tincture against dandruff, according to the invention, has the following composition:

	<b>w</b> t%
	0.60
Peru balsam Resorcinol	0.50
Pantothenic acid	1.00
Vitamin B <sub>6</sub>	0.03
Inositol	0.01
Nicotinamide (vitamin PP)	0.015
Vitamin H (biotin)	0.015
Essence of birch	0.50
Isopropanol	65.00
Distilled water	32.33
	100.00

It was prepared as follows:

First the Peru balsam was completely dissolved in the alcohol, and then added to a larger quantity of alcohol for the preparation; the solution was then allowed to stand for 3 days in a hermetically sealed container after thorough mixing in a mixing apparatus, so that the Peru balsam can completely dissolve in the alcohol during this time period.

After this period, all the water-soluble constituents, that is the resorcinol, the pantothenic acid, the vitamins  $B_6$  and  $H_7$ 

the inositol and the nicotinamide (vitamin PP) were dissolved separately and carefully in distilled water, so that deposits remained.

These solutions were incorporated, in particular, in larger quantities of alcohol, at approximately 50 vol%, and added in portions after a thorough mixing to the solution of Peru balsam, and then left to stand for 3 days with constant stirring using a mixing apparatus.

After one week of additional standing, the entire liquid formed a homogeneous phase and it was ready to be filtered and poured into bottles.

#### Summary

Antiseptic capillary tincture, notably for the treatment of disorders of the scalp, notably remarkable in that it presents the following characteristics, taken separately or in combinations:

1. The capillary tincture has the following composition:

	wt%
Peru balsam	0.60
Resorcinol	0.50
Pantothenic acid	1.00
Vitamin R <sub>6</sub>	0.03
Inositol	. 0.01
Nicotinamide (vitamin PP)	0.015
Vitamin H (biotin)	0.015

Essence of birch	0.50
Isopropanol	65.00
Distilled water	32.33
	100.00

- 2. Peruvian balsam is used as antiseptic and to soothe irritation due to pruritus.
- 3. Resorcinol is used as a nutrient and as a skin regenerator, supported in its action by the nicotinamide or vitamin PP and vitamin H.
- 4. Pantothenic acid is used as an agent against functional disorders of the skin and against alopecia, and also to accelerate pigmentation and the growth of the hair, in cooperation with inositol and vitamin  $B_6$ .
  - 5. Essence of birch is used as perfume.

By proxy: Cabinet Madkeuf

#### SEARCH REPORT ON NOVELTY

Documents that could negate the novelty of the drug: None. Documents illustrating the state of the art in the field: French Patent No. 1,255,347.

## This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

#### **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

#### IMAGES ARE BEST AVAILABLE COPY.

☐ OTHER:

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.